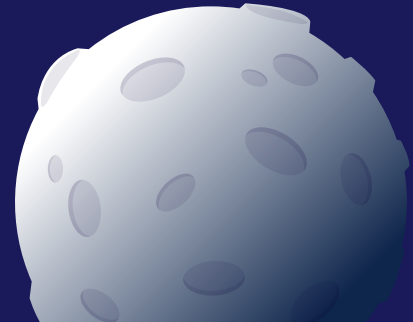




# Algoverse

Bi-Weekly Progress 2



by Logic Legends

# Small Recap



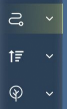
# Backend Progress

- Added React test and builds to the CI/CD Pipeline
- Implemented first algorithms for sorting and path finding

✓	api-build	1m 22s
✓	api-test	1m 2s
✓	api-checkstyle	1m 9s
✓	api-spotbugs	1m 23s
✓	frontend-build	1m 0s



Search



Sorting



Treesearch



Pathfinding

Design

Implementation



Search

Pathfinding

Sorting

Trees



Sorting

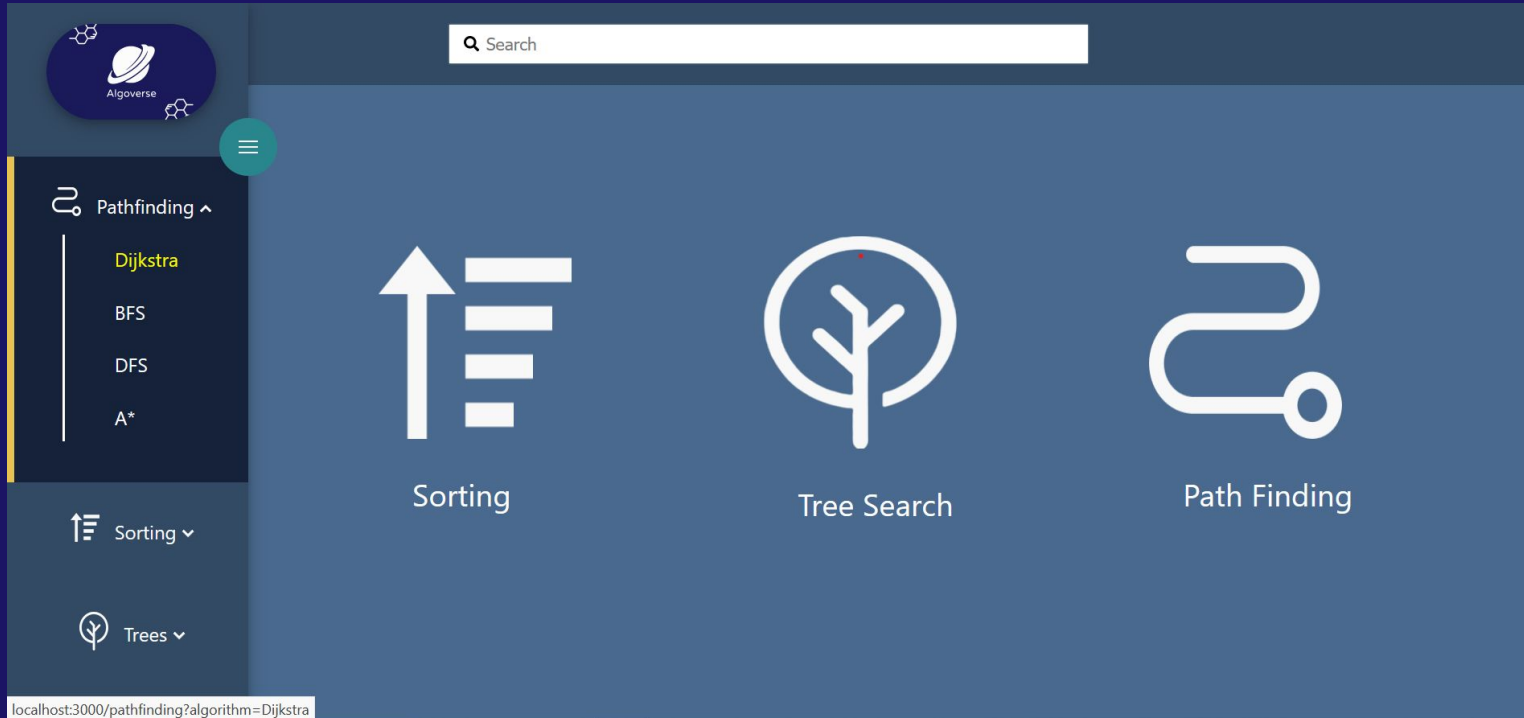


Tree Search



Path Finding

# Frontend Progress – Sidebar



Pathfinding  
AlgorithmDijkstra  
BFS  
DFS  
A\* Search

Sorting Algorithm

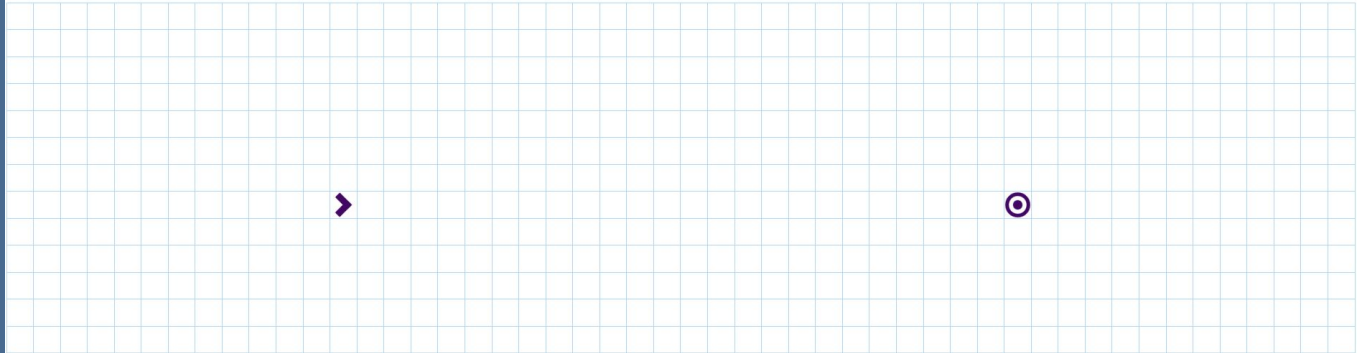
Tree Search  
Algorithm

# Pathfinding Algorithm - Dijkstra



➤ Start Node    🎯 Target Node    💣 Bomb Node    🔒 Weight Node    □ Unvisited Node    ■ Visited Nodes  
■ Shortest-path Node    ■ Wall Node

Pick an algorithm and visualize it!



Pathfinding  
Algorithm

Dijkstra

BFS

DFS

A\* Search



Sorting Algorithm

Tree Search  
Algorithm

## Order of changes

```
function BinarySearch(array, element)
    pseudocode
    pseudocode
    pseudocode
    for i < 20
        pseudocode
        pseudocode
        pseudocode
    Finish
```

Usecases of Binary Search:

- usecase 1
- usecase 2
- usecase 3
- usecase 4

Binary search is best used in ...

# Schedule

Week	✓	✓	9	10	11	12	13	14	15
Frontend	Finish Designs, Implementation Main Page + Routing		Pathfinding		Sorting + Treesearch		Testing and Bugfixing		
Backend	Algorithm Implementation		Tests + Helping out Frontend		Buffer (more data structures, help Frontend)				





Q

A